

## Astronomy

### 4-3 The student will demonstrate an understanding of the properties, movements, and locations of objects in the solar system. (Earth Science)

#### 4.3.1 Recall that Earth is one of many planets in the solar system that orbit the Sun.

**Taxonomy level:** 1.2-B Remember Conceptual Knowledge

**Previous/Future knowledge:** Planets orbiting in the solar system are being considered for the first time. Students in 1<sup>st</sup> grade (1-3.1) studied the Sun as an object in the daytime sky but did not study planets or even the fact that Earth is a planet. In 8<sup>th</sup> grade (8-4), students will study the characteristics of the planets more fully.

**It is essential for students to** know that Earth is a planet that orbits around the Sun. There are also other planets that also orbit the Sun; some are closer to the Sun than Earth and others are farther away. Some are small, rocky planets like Earth (Mercury, Venus, Mars); some are large planets with a surface made of gas (Jupiter, Saturn, Neptune, Uranus) unlike Earth.

*Planets* Planets are bodies, natural satellites, that orbit the Sun, a star.

*Earth* Earth is the third planet from the Sun in the solar system

*Sun* The Sun is the name for the central star in our solar system.

The sequence of the named planets from the Sun outward is also part of this recall.

**It is not essential for students to** know specific data about each planet, for example, distance from sun, time of revolution or rotation. Students do not need to name the planets with rings, nor do they need to identify the names of or number of moons a planet has. Students do not need to order the planets by any characteristic other than their orbiting arrangement as they revolve around the Sun.

#### **Assessment Guidelines:**

The objective of this indicator is to *recall* that Earth is a planet along with other planets that orbit the Sun; therefore, the primary focus of assessment should be to remember that there are planets that orbit the Sun. However, appropriate assessments should also require students to *identify* a planet by name or position; *recognize* planets whose surface is like or unlike Earth; or *recognize* the Sun as the star around which planets orbit.